

Description

- TOTAL POLYSTYRENE 1050 is an ice color, high heat resistant crystal polystyrene designed for both extrusion and injection applications.
- This grade can be used pure for the production of sheets and transparent cups or in dilution with other TOTAL HIPS.

Applications

- High Heat Resistant Thermoformed Product
- Foam Extrusion
- Light Diffuser Plate (LDP)

Properties	Method	Unit	Value (*)
Rheological			
Melt Flow Index (200°C / 5kg)	ISO 1133	g/10min	2.8
Spiral Flow (220°C)	-	Cm	42
Thermal			
Vicat Softening Point 10N (T° increase = 50°C/h)	ISO 306	°C	105
Coefficient of Linear Thermal Expansion	-	mm/°C	8.9
Mechanical			
Unnotched Izod Impact Strength	ISO 180	kJ/m ²	8.5
Tensile Strength at Break	ISO 527	MPa	40
Elongation at Break	ISO 527	%	2.5
Flexural Modulus	ISO 178	MPa	2950
Rockwell Hardness	ISO 2039	-	L70
Electrical			
Dielectric Strength	-	kV/mm	150
Surface Resistivity	ISO IEC 93	Ohms	>10 ¹³
Others			
Density	ISO 1183	g/cm ³	1.04
Moulding Shrinkage	-	%	0.4-0.7
Water Absorption	ISO 62	%	0.04
UL 94 Class	UL 94	-	HB

(*) Data not intended for specification purposes.

*All tests have been carried out at 23°C unless otherwise stated.

*Mechanical properties have been measured on injection molded test specimens.

*Bulk density is approximately 0.6 g/cm³.

General Information

- Processing condition: Temperatures during extrusion/injection should be below 240°C.
- Recommended Pre-Dry condition: 70°C for 2 hours.
- Please refer to the safety data sheet (SDS) for handling and storage information. It is advisable to convert the product within six months after delivery provided storage conditions as given in the SDS of our product. SDS may be obtained from the website: www.totalrefiningchemicals.com

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